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ABSTRACT

With the diminishing of the supply of game, it seems likely that the remote settlements and remoter cabin dwellers in Northern Saskatchewan will have to accept an increasing degree of commerce with outsiders. It is desirable that the Northerner be literate in order to meet the requirements of employment and to conduct his own affairs. This report discusses relevant areas of knowledge and skill, resources, philosophy, psychological bases, lesson plans and materials, rationale for the symbol-learning materials, the pace of learning, training of coaches, two types of training in communications and arithmetic, training of coaches, developing the curriculum, sequencing the curriculum, evaluation, and maintaining the gains. (DB)

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AN ADULT BASIC LITERACY
PROGRAM FOR REMOTE
COMMUNITIES

by

Naida Waite

SASKATCHEWAN NEWSTART INC.

January, 1971



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FOR AN ADULT BASIC LITERACY PROGRAM
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CURRICULUM PROPOSAL
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REMOTE COMMUNITIES IN NORTHERN SASKATCHEWAN

The North and the Northern Way of Life

1. The Northern communities are very small - often only a few houses clustered around a trading post, a "Co-Op" store, a post office, a school, and perhaps a regional hospital. However, they also serve as trading centers for people living in even more remote cabins.
2. The terrain is "bush" and lakes, and the main occupations are fishing (commercial and sport), trapping, and the cutting of pulp wood. Recent attempts to clear some fields for raising cattle feed have not been successful, due to the high water table and the brief summer season. To residents who have never travelled south, concepts connected with farm life are as unfamiliar as the city scene.
3. Regular roads penetrate to some of these communities; "natural resources" roads cut straight lines through the bush to serve pulp cutting operations; but the most practical way to reach the settlements, especially in winter, is to fly. Each settlement has a grassy or snow-covered airstrip, and most have a lake on which planes can land with pontoons in summer and skis in winter.
4. Locally, transportation by dog team has given way largely to the use of snowmobiles. This is more expensive and more complicated, but the Northerners are adept at making their own emergency repairs on the trail.
5. In general, the Northerners like their remote location, and many have no desire to join the urban "rat race". They deprecate the pollution of rivers and air in Southern Canada, and are deeply concerned about protecting the North from such pollution.
6. There is little work of a type that brings in steady wages, although incentives are being applied by senior governments to attract industries into the Northern area. Many families are dependent on welfare all or most of the time. Families tend to be large.

7. The Northern life pattern has accustomed most of the inhabitants to personal freedom - freedom to do things in their own way at their own time. They value this quality of life. It does not always accommodate easily to the demands of foremen, eight-o'clock whistles, catching the one and only morning bus, or cutting wood when the time is right to fish or hunt.
8. For many, little or no book learning has sufficed, from their point of view. In some communities the highest grade taught in the local school is Grade 3 or 4 - the students do not stay long enough to go farther.
9. When an industry has been induced to select a Northern site, the aim of improving the economy of the area is not likely to be achieved easily. First, there may be local resistance to its effect on the environment - a campaign is at present being waged to prevent a pulp mill from being located on one of these Northern rivers. If the local people are to get any of the better-paying jobs, there will have to be a "crash" program of education. The experience has been that the industrial buildings can be raised more quickly than the educational level of the community, with the result that needed help is brought in from outside. Work skills can often be learned on the job, but the personal or "life skills" needed to get along on the job require to be learned first. Poor health may also be a factor in job failure; this, too, can be improved through better life skills - diet, safety, first-aid training.
10. Television is not available in the Northern communities, and they are not linked with the South by telephone. Radio provides their main contact with the outside world.

Assumptions about the Prospective Adult
Basic Literacy Student in the North

11. Even before the Northerner gets close enough to an adult education class to experience the fears and doubts common to most adult basic education students, he may have other considerations to contend with:

Perhaps he is quite satisfied with his life as it is, and does not want to have his routine upset and his time regimented.

Perhaps he fears that the program will result in pressure upon him to migrate South for work - especially if the education program precedes the establishment of any local industry.

Perhaps he wants to enter directly into some occupational training and does not appreciate the need for the basic educational prerequisites.

In other words, his chief problem about the adult basic literacy program may be that he does not want it. The greater his educational deficit, the less likely he is to perceive it in perspective.

12. If he belongs to an ethnic group (many are Metis or Indian) that accords much respect to age, he may not want to learn from an instructor younger than himself.
13. If English is his second language, lack of fluency may be a deterrent to enrolment.
14. Distances may necessitate his living away from home to attend the classes, or commuting from his cabin to the settlement.
15. If he does enter the program, he is assailed by the usual adult enrollee's worries:

Can I learn?

Will I appear stupid or ridiculous?

What if my boy in Grade 1 learns more quickly than I do?

How can I sit still at a desk all day?

When people see me go to the classes, will they know I can't read or write?

Won't I feel out of place "going to school" at my age?

16. He may have failed at learning to read during regular school attendance, or he may have had little opportunity to go to school if his family was nomadic or did not value education.
17. The activities, concepts and vocabulary connected with his life are different in some degree from those connected with urban or farm life. If he previously tried to learn from books designed for use in these other environments, he may have been confused by them, and may wonder how relevant the new course will be for him.
18. He is probably knowledgeable and skilled in techniques of survival, the habits and habitat of fish and game, and the use of firearms.

The Needs

19. With the diminishing of the supply of game, it seems likely that the remote settlements and remoter cabin-dwellers will have to accept an increasing degree of commerce with "outsiders" - industrial employers, tourists, customers of their own co-operatives which might be established. Perhaps some "cottage" industries (similar to the soapstone carvings by the Eskimos) could be developed. In any event, it seems desirable for the Northerner to be literate, in order to meet the requirements of possible employment and to conduct his own affairs. For the few who may wish to migrate South, education is a necessity.
20. Both the provincial and federal governments are concerned about the depressed economic condition of these communities and the bleak future they face if their economic condition is not improved. The governments see the creation of industrial employment opportunities and the up-grading of the potential local labour force as part of the total effort required. They probably assume that funds invested in this way will be recovered later through a reduced demand for welfare, in addition to increasing the self-reliance of the people.
21. There is of course a broader social view of literacy as a necessary element of human life and enlightenment. This view appears to be more widely entertained by people in the South and Southerners working in the North, than by the Northerners.

Relevant Areas of Knowledge and Skill

22. The relevant areas of knowledge and skill at the basic literacy level (equivalent to Grades 0 to 5.0) appear to be communication (oral expression, reading, writing, spelling, composition), arithmetic, the life skills mentioned earlier, and learning how to learn.
23. For specific goals, it may be necessary to emphasize certain subject matter areas. (This will be dealt with in detail later in the proposal.)

Resources

24. A reality-oriented basic literacy course for adults must be designed to operate within the limits of resources available, in terms of funds, time, facilities, employment possibilities, the background of the prospective students, and the skill and experience of the instructors (who will be referred to as "coaches" in this proposal). The curriculum must not depend on resources that may not be available in Northern communities;

if such items are introduced for the benefit of communities where they do exist, this must be on an optional basis and in such a way that the communities which lack them can conveniently use the materials to produce comparable results by other means.

Philosophy

25. As to the formal categories of education philosophy, the proposed curriculum is eclectic, as will be illustrated by the following:

<u>Curriculum Characteristics and Philosophical Positions</u>	<u>Related Category of Philosophical Thought</u>
Some specific pre-existing things are to be learned	(Essentialism)
There will be drill and practice	(Essentialism and Perennialism)
Processes (learning, reasoning) will be taught	(Progressivism)
Students will learn by doing .	(Progressivism)
The climate will be co-operative, not competitive ...	(Progressivism)
Social and problematical topics will be entertained ...	(Progressivism)
Much of the course will be individualized	(Existentialism)
Grouping for discussion will be heterogeneous	(Progressivism)
Grouping in the symbol-learning phase will be homogeneous	(Perennialism)
There will be testing	(Essentialism and Perennialism)

26. It does not appear inevitable or desirable that all of the prospective students will have identical goals. Of those who enrol, some will probably do so for a variety of reasons other than an intrinsic desire to learn. It may be possible to make the course sufficiently interesting and useful that an intrinsic desire to learn will be aroused.

27. Most will probably want to stay in the North; a few may want to continue with their education and migrate to find a career in Southern Canada. The curricular needs of these two groups will be different in some respects. The course will be designed to serve both.
28. Provision must be made for a student to change his goal or plans, with a matching adjustment in his curriculum if necessary.

Psychological Bases

29. The following theories, methods and strategies will be applied:
 - (1) Gestalt
 - The first lesson in reading will start with a complete sentence meaningful to the students. Meaningful wholes will be stressed throughout.
 - (2) Deduction
 - (1) by deduction, the students will identify the individual printed words from their order in relation to the words in the spoken sentence. (2) by deduction they will identify the symbols representing the sounds which form the words.
 - (3) Induction
 - The learned sound-symbols will then be re-synthesized to form new words.
 - (4) Phonics
 - Perception of the sound-and-symbol relationship will always precede practice in quick word-recognition ("look-say") responses.
 - (5) Linguistics
 - Sentence patterns, substitutions, transformations, context clues, intonation, etc. will be focused on.
 - (6) Behaviourism
 - There will be drilling toward automatic response to familiar printed words, and automatic command of basic number facts, such as multiplication tables.
 - (7) Field Theory
 - (1) Discussion periods will create "learning situations" in which students will be helped to perceive life skills in relation to their own lives and experiences. (2) An attempt will be made to relate both communication and arithmetic to that which

is familiar and important in the students' social, cultural and economic environment or "life space".

(8) Integration

- (1) An integrated language arts approach will be used, developing the various aspects of communication in a simultaneous, related way. (2) Where reading skill impinges on arithmetic skill (e.g., in problems expressed in words) the two will be integrated, so that students will be trained in the process of understanding word problems.

(9) Accumulation

- (1) Frequent reviews and review testing will insure that achievement is like an expanding circle rather than a moving point. (2) The spiral concept of curriculum will continually reintroduce subject areas for more sophisticated or demanding treatment. (3) In reading, the teaching of the symbols and their sounds will be based on a series of key sentences which will become very familiar and remain cumulatively available for reference.

(10) Creative Inquiry

- Students will be trained to think creatively about their learning activities - for example, (a) to apply checking systems to their completed arithmetic exercises and problems before looking up the right answer; (b) to estimate the probable size of an arithmetic answer and then see if their answer is in approximate agreement; (c) to apply the criterion of logic to all their work, including reading; to ask themselves, "Does it make sense?"; (d) to observe the results of various strategies for learning different kinds of content, finding out which ways work best for them.

30. Considering the conditions of Northern life, and the apparent absence of a strong general desire to participate in adult basic literacy programs, the motivational factor would seem to be of paramount importance. The training materials and methods must be chosen or designed to appeal to prospective students. The following points are believed to be important:

(1) Recognition of the student's adulthood

- (a) in the way the teacher talks to him;
- (b) in matters of class "control" (non-regimentation, freedom to move and speak, eat a chocolate bar, etc.);

- (c) in the nature of the materials from which he learns - e.g.,
 - adult interest level
 - adult appearance of books
 - adult pictures (if any) in books
 - adult techniques of learning, including reasoning;
- (2) Some early success as proof of his ability to learn;
- (3) Praise and other forms of recognition for progress, such as recorded credit for passing a test;
- (4) A commitment by the student to someone (or several people) other than himself;
- (5) Personal interest and friendliness shown by the coach;
- (6) Many indications, direct or indirect, that literacy is useful and is a source of satisfaction (e.g., being able to write one's name and read what one is signing);
- (7) Obvious personal relevance of what is being learned:
 - (a) examples, concepts, pictures, etc. should be within the student's realm of experience;
 - (b) content should appear useful or interesting by his standards;
 - (c) he should not be required to "learn" what he already knows;
 - (d) reading material, even in the first lesson, should make sense;
- (8) Variety in reading materials, to keep up interest and appeal to different tastes:
 - (a) humour
 - (b) verse
 - (c) pieces in dialogue form (which can be read responsively, by students in pairs, for variation)
 - (d) some purely local content (local history, geography, legends, stories);

- (9) Avoidance of embarrassment:
 - (a) privacy as to grade level
 - (b) privacy for mistakes or lack of knowledge - a chance to try without having the effort judged by someone else;
 - (10) An instructional environment that is different from the school environment in which he previously failed to become literate (although experience in Chicago appeared to indicate that those who had never had a chance to go to school wanted, as adults, the "real" kind of school environment they had missed);
 - (11) A goal and definite intermediate objectives:
 - (a) the establishment of a goal is difficult if there is no strong desire to learn - the absence of either one weakens the other;
 - (b) the definite objectives may have to come first, and the broader goal appear later, when the student's self confidence has increased;
 - (c) the goal should remain open to change with changes in the situation (e.g., employment opportunities);
 - (d) but somehow the student must have a sense of "going somewhere" so he can have a sense of direction in learning, measure his progress, and have the satisfaction of arriving at definite "success points" along the way.
31. In case of conflict between motivational and pedagogical considerations, the pedagogical ones will not necessarily prevail. (People who wanted to learn have done so despite some severe pedagogical disadvantages; "good" pedagogy has failed to reach the unmotivated.) However, such conflicts will be avoided where possible, and there will be no deliberate attempt to ignore widely accepted general principles of learning, or to negate any specific tenets of reading instruction except those which are incompatible with the approaches chosen.
32. The course should initially engage the students where they stand at the time of enrolment - educationally, motivationally, socially, and environmentally. As they master the early content and the processes of learning, the course should be broadened in an attempt to enlarge their horizons on all of these dimensions. The materials introduced and the teacher guides will facilitate this.

33. On enrolment, those who have some degree of literacy will be given achievement tests for purposes of placement and diagnosis of specific difficulties. Those who already know the letter symbols and their sounds and possess word recognition skills, will be able to begin with individualized study at a higher level in the basic literacy course.
34. Tests of mental ability, aptitude, etc. will be given. It is difficult to obtain a reliable measure of mental ability in the case of illiterates; however, some limit will have to be set, below which applicants will not be accepted. Those with severe learning or perceptual problems will not be enrolled, as there would be neither time nor professional skill available to assist them locally. It is hoped that there will be some short test available through which they may be identified before going through the procedure of enrolment.
35. Those who lack sufficient command of oral English will be enrolled in the Fluency First Course, where they will be given training in oral fluency plus reading, spelling, etc. and arithmetic; later they will join the regular literacy class at a point where the two curricula converge.

Lesson Plans and Materials

36. Since the coaches may or may not be professionals, the plan and materials will need to be well organized and detailed. Time and effort will be saved by letting the materials speak directly to the student as much as possible, with the coach acting as a tutor, motivator and guide (instead of channeling all of this detail from the book through the coach to the student). This book-student relationship, which will provide all the advantages of individualized prescribed instruction, can be used as soon as all the letter symbols have been mastered and some facility in word recognition has been achieved.
37. During the symbol-learning stage, the language arts and the reading and writing of numbers will be combined. There will be much dependence on the teacher in this phase. Since a new approach is to be used for this initial learning, new material will be designed. Notes for the guidance of the coach will be placed in the margins of the student book for this phase. (This will have the advantage that if the student takes his book home he can receive extra help from anyone who can read. It will also make the book conveniently usable in an "each one teach one" manner where classes are not available.)

38. For the Individualized Prescribed Instruction stage, in both communication and arithmetic, commercially available materials will be used or adapted wherever possible, new materials being created only to the extent necessary to fill the gaps.
39. There will be a coach guide book for the whole course showing how the materials fit into the total plan, and providing general guidance to the coach, plus tests and answers.
40. Some life skills topics will be included in the readings, and will be the basis for many of the discussion ("oral expression") periods, with notes provided for guidance of the coach. The provision of a more formal treatment of life skills is under discussion; if this is to be done, it will not be included under the heading of "basic literacy" and will therefore not be further considered here.
41. In learning how to learn, the student will be guided through such processes as the following:
 - (1) Identifying words and symbols by the order in which the printed matter corresponds to the spoken words and sounds in the key sentences;
 - (2) Practising word recognition until he can recognize the words quickly;
 - (3) Combining symbols to form other words;
 - (4) Sounding out unknown words;
 - (5) Systematically reviewing what has been learned;
 - (6) Getting sentence meaning from context clues;
 - (7) Becoming familiar with sentence structure through analyzing, substituting, transforming, phrasing, etc.

He will first cognitively achieve an understanding of the basic number facts, then as each group of facts has been understood, he will use drill and practice to gain automatic command of them.

The coach will continually draw the students' attention to the learning process they are using, and the reason for using it will be kept before them. Each student will be led to observe the results he achieves with the various processes, in order that he may give preference to

those which are most effective for him. From time to time a student will be asked to state what process he is about to use and why. Tests will focus on the processes of learning as well as on what has been learned.

Rationale for the Symbol-Learning Materials

42. In accordance with B.F. Skinner's idea that mistakes should be avoided while learning (because the student "learns what he does"), prompts will be provided initially when there is a choice of sounds related to a letter symbol. The code used for the prompts will bear an obvious and patterned relationship to the symbols. The prompts will be given separately below the word, so that the student will use them as a guide but then look back to the word itself and read from the normally spelled version. The following examples will give an idea of the pattern:

Regular short vowel sounds will be indicated by the absence of a prompt -

job trap him but look

Long vowels will be shown with a short line, after the manner of some dictionaries:

pay heat try tool cure
ā ē ī ōō ū ē

Irregular vowels or combinations will have their actual sound shown:

said women bread beauty want all nation
e i e ū o aw āshun

Silent letters will be indicated by a stroke through the letter:

hope take side hour
ō ē ā ē ī ē h

All of the "ur" sounds which are differently spelled, will be cued "ur":

bird vertical word heard (but: fur)
ur ur ur ur

The voiceless consonant sound "th" will be marked with an underline, later in the program:

thin thick (but: the, then)

The voiced "s" will be indicated with a "z", after the "z" has been learned:

dogs	sounds
z	z

The voiced "sh" (like the sibilant sound in measure) will be indicated by zh when necessary:

measure
zh

43. The student's dependence on these prompts will be brief. Prompts will appear on the left-hand pages only. Identical content without the prompts will appear on the opposite pages. Students will be encouraged to practise reading with the prompts on a left-hand page until they are sure of the words, then to read from the right-hand page until they can do so fluently without the prompts.
44. Research has indicated that children for whom English is a second language have difficulty in organizing a sentence into meaningful phrases, and this hinders their comprehension. It seems likely that adults may have a similar problem if English is their second language. Therefore, when students begin reading for comprehension, the sentence words will be spaced in phrasal groups on the left-hand page, and printed with ordinary spacing on the opposite page. A student will read from the left-hand page until he has understood the meaning, then will read several times from the opposite page, before answering the comprehension questions or reading aloud to the coach. However, if the student does not need this assistance, he may be directed to disregard these left-hand pages except when he has difficulty.
45. Dr. Hamden Forkner, formerly a professor at Teacher's College, Columbia University, emphasizes that in the teaching of shorthand, familiar material should be used in the early stages of developing speed. Since the use of shorthand involves encoding and decoding with time as a critical factor, it compares in some degree with ordinary writing and reading. The rationale being described in this proposal provides for considerable practice with familiar material (e.g., the key sentences, and repeated practice with and without prompts). This will apply also when the student begins to focus on reading speed. A fairly long item will be given on a right-hand page, with the number of words shown at the end of each line. The students can all take these timed exercises at once, although they may be working at different lessons. The coach will simply start them and give them one minute (or other suitable time) to read silently. When stopped, they will calculate the number of words they read. Then they will read the same

material for another equal period of time, and perhaps a third or fourth, each time trying to read farther. Since they are becoming more familiar with the content, there should be an improvement, and this should encourage them. The actual experience of "taking in the words" at a faster rate should be beneficial. When the timing sessions for that item are completed, the students will turn the page and answer the comprehension questions on the other side.

46. Slowness of handwriting is one of the problems of newly literate adults. It works to their disadvantage when they write a timed test or have to fill out an application form or time sheet. Timed practice in writing can be given to those who desire it. The same content can be used but a longer time be given.

The Pace of Learning

47. In the Individualized Prescribed Instruction stage, the student will work at his own pace. Prior to that, while the class is learning the symbols, progress will be teacher-paced.

Two Streams*

48. It is proposed that there will be two streams, with a common core. The aim of one stream will be to provide a useful terminal course for those who intend to remain in the locality - useful in their everyday personal contacts and transactions, including some practical record keeping. The aim of the other stream will be to prepare students for entry into the Adult 5-10 Program. For the latter program they would probably have to go to a Southern training institution. Obviously the two streams will have much in common.
49. It is proposed that the terminal course will pursue communication skills only to the degree required for ordinary purposes in the Northern locality, while certain practical skills related to arithmetic

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As a result of discussion at the Adult Basic Literacy Seminar at Saskatchewan NewStart on January 29th, all materials beyond the "core", both in communications and arithmetic, will be presented without labels as to "stream". Students will select from these extra materials whatever they want to learn.

The nature of the additional materials will be explained in the coach manual, so that coaches will be able to give guidance, if desired, in the selection of reading material.

and business transactions will be added (probably beyond the Grade 5.0 level for some of these students).

50. For those who intend to continue their education, reading and the other communication skills will be important, and will therefore be emphasized. The arithmetic curriculum will proceed in the usual order, on the assumption that the "business arithmetic" skills will be acquired in the Adult 5-10 Program.
51. There will also be differences in the life skills content of the reading materials. Students expecting to go South for further education, training or employment, will additionally be exposed to materials about city life and work, and the process of adapting to a different environment.

Training of Coaches

52. In addition to the Coach Guide, and the marginal notes in the symbol-learning book, assistance will be given in the form of a short Basic Literacy Coach Training Course. This will focus on the objectives and materials of the course, techniques for keeping all of the students usefully engaged in the process of learning, appropriate strategies and methods related to various parts and stages of the course, and the coach-student relationship. Particular emphasis will be given to the status of the students as adults, the contrasting roles of the coach in the symbol-learning stage and the Individualized Prescribed Instruction stage, and to the need and strategies for helping students to learn how to learn.

Developing the Curriculum

53. The Basic Literacy curriculum will be developed in close liaison with the development of the Fluency First curriculum, with a view to their smooth convergence at an optimum stage to be jointly determined by the respective developers.
54. Tentative behavioural objectives will be stated for each lesson. Learning experiences will be planned and materials selected or created toward the achieving of these objectives; any materials to be created will be developmentally tested with one or two students (as representative as possible of the target population) during preparation. The whole program will be pilot tested, revised where necessary, retested, etc. and then field tested in the Northern communities.

55. During any of the tests, it may be necessary to revise specific objectives, combine, interpolate, delete, etc., in the light of experience.

Sequencing the Curriculum

56. The sequencing of the curriculum will be done with a view to:
- (a) Proceeding from the know to the unknown, from the easy to the difficult, from the "here and now" to the more distant in place and time;
 - (b) Keeping the content and skills rotating (the "spiral" strategy) so that they are not learned and forgotten, but are continually being revived on a slightly more sophisticated level or to a more demanding level of accuracy and/or speed;
 - (c) Providing what is necessary and practical at the most opportune time (e.g., the "business arithmetic" for the terminal students);
 - (d) Taking advantage of potential power (e.g., in selecting for earliest lessons those letter symbols that will be most useful in forming many appropriate words in order to hasten the progress toward more interesting material);
 - (e) Co-ordinating or interweaving interdependent concepts in the various aspects of communication and between arithmetic (especially word problems) and the communications skills.

Where these principles conflict, the more crucial will prevail.

Evaluation of the Curriculum, Materials, Methods, and Effectiveness of Coach Training

57. Plans for evaluating the entire "package" will be developed along with the curriculum, in consultation between the developer and an evaluation consultant. At this point it is contemplated that the criteria will be
- (a) A post-test, to be compared with the pre-test;
 - (b) A transfer exercise;
 - (c) Classroom observation (focused by a check sheet);

- (d) A later retention test (say after three months);
- (e) A subjective assessment of the student's desire to read - obtained through interview or student report at the time of the follow-up test, and based on the amount of reading the student claims to have done from choice after the course ended.

Maintaining the Gains

58. It would be impractical to give literacy to adults in remote communities and then not see that they had something to read. There are no local newspapers. Two periodicals (Our Native Land, published by the Canadian Broadcasting Corporation, and The Native People, published by The Alberta Native Communications Society, Edmonton) have been recently examined for reading difficulty. The first was about Grade 11 or 12 on the Fry Readability Graph, while the second varied from that level to "post-graduate". These would not be useful to newly literate (Grade 5.0) adults remaining in the North. Perhaps a digest of these and other native periodicals could be written at about a Grade 4 level and provided to ex-students. Such a periodical could be useful immediately for students who enter the course at the Grade 3 or 4 level; introduction of it during the course would be conducive to continued use of it afterwards.

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